

Attorney Docket No.: PENN-0743
Inventors: Greene et al.
Serial No.: 09/783,896
Filing Date: February 15, 2001
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In the Claims:

Please cancel claims 2-10 and 12 without prejudice.

Please amend the claims as follows:

1. (amended) A method for quantifying molecules expressing a selected epitope in a sample comprising:

(a) immobilizing a molecule expressing a selected epitope in a sample to a selected surface;

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(b) contacting the surface with an epitope detector so that the epitope detector binds to immobilized molecules on the surface, said epitope detector comprising an oligonucleotide attached to a monoclonal antibody for the selected epitope, a single chain Fv for the epitope or a constrained epitope specific CDR;

(c) amplifying the oligonucleotide of said epitope detector by RNA amplification;

(d) contacting the amplified oligonucleotide with a fluorescent dye which binds to RNA and stains the amplified oligonucleotide; and

(e) measuring fluorescence emitted from the stained oligonucleotide which is indicative of epitope detector bound to the surface and molecules expressing the selected epitope in the

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sample.

11. (amended) A method for detecting molecules expressing a selected epitope in a sample comprising:

(a) immobilizing a molecule expressing a selected epitope in a sample to a selected surface;

(b) contacting the surface with an epitope detector so that the epitope detector binds to immobilized molecules on the surface, said epitope detector comprising an oligonucleotide attached to a monoclonal antibody for the selected epitope, a single chain Fv for the epitope or a constrained epitope specific CDR;

(c) amplifying the oligonucleotide of said epitope detector by RNA amplification;

(d) adding the amplified oligonucleotide of said epitope detector from step (c) to a reverse transcriptase based reaction or a replicase based reaction to increase sensitivity;

(e) detecting the amplified oligonucleotide of said epitope detector from step (c) by contacting the amplified oligonucleotide of said epitope detector from step (c) with a fluorescent dye or probe which binds RNA and stains the amplified oligonucleotide and measuring fluorescence emitted from the stained amplified oligonucleotide which is indicative of epitope